WHAT IS CLAIMED IS:

10

15

20

3.

1. A synergistic herbicidal composition comprising; (A) mesotrione, and: (B) a second herbicide selected from; (B1) triazines (B2)triazolinones (B3) triazinones (B4) imidazolinones (B5)dicamba (B6)flumetsulam (B7) trifloxysulfuron (B8) tritosulfuron (B9) triasulfuron (B10) pyriftalid (B11) prosulfocarb (B12) pretilachlor (B13) cinosulfuron or their herbicidally effective salts. An herbicidal composition according to claim 1, wherein component (B) is 2. terbuthylazine, simazine, dicamba, flumetsulam, imazamox, imazapyr, imazethapyr, metribuzin, trifloxysulfuron or pyriftalid.

An herbicidal composition according to claim 1, wherein the weight ratio of

component (A) to component (B) is between about 32:1 and about 1:20.

- 4. An herbicidal composition according to claim 3, wherein the weight ratio of component (A) to component (B) is between about 8:1 and 1:15.
- 5. An herbicidal composition according to claim 4, wherein the weight ratio of component (A) to component (B) is between about 4:1 and about 1:10.
- 5 6. A method for controlling undesirable vegetation, comprising applying to the locus of such vegetation a herbicidally effective amount of a composition as claimed in claim 1
 - 7. A method according to claim 8, wherein the combined amount of components (A) and (B) applied to the locus of the undesirable vegetation is between about 0.005 kg/ha and about 5.0 kg/ha.
- 8. A method according to claim 7, wherein the combined amount of components (A) and (B) applied to the locus of the undesirable vegetation is between about 0.5 kg/ha and 3.0 kg/ha.
 - 9. A method according to claim 8, wherein the combined amount of components (A) and (B) applied to the locus of the undesirable vegetation is at least 1.0 kg/ha, and wherein at least 0.02 kg/ha of component (A) is applied to the locus of the undesirable vegetation.

15